

CAC Meeting

May 25, 2023



[www.chesapeaketrees.net](http://www.chesapeaketrees.net)

# Tree Canopy Update

*Julie Mawhorter*  
*Forestry Workgroup,*  
*Tree Canopy Coordinator*  
*USDA Forest Service*  
*[julie.mawhorter@usda.gov](mailto:julie.mawhorter@usda.gov)*

The screenshot shows the homepage of the Chesapeake Tree Canopy Network. The header includes the logo and navigation links: SIGN UP, NEWSLETTER ARCHIVE, ABOUT US, CONTACT US, CHESAPEAKEFORESTBUFFERS.NET. Below the header, there's a main banner with a group photo of people and the text: "Welcome to the Chesapeake Tree Canopy Network". A sidebar on the right features a link: "DE: Delaware Commits to Planting and Maintaining Trees in the State" with a "Read More" button. Below the banner, there's a section titled "New Resources to Explore" with links to "County Tree Cover Fact Sheets" and "Guide for Local Government Leaders". At the bottom, there's a section titled "Tree Cover Status & Change FOR CUMBERLAND COUNTY, PA" with three data points: 43.6% Total Percent of County with Tree Cover, \$42.6 Million Annual Benefits provided by Tree Cover, and -791 Acres Net Loss of Tree Cover on Developed Lands, 2013 to 2017. To the right of this section is a link to "A Local Government Guide to the Chesapeake Bay" with a sub-link "Module 4: Capitalizing on the Benefits of Trees".

Chesapeake Tree Canopy Network

SIGN UP NEWSLETTER ARCHIVE ABOUT US CONTACT US CHESAPEAKEFORESTBUFFERS.NET

WHY TREE CANOPY? - UNDERSTAND YOUR CANOPY EXPAND YOUR CANOPY - MAINTAIN YOUR CANOPY -

Welcome to the Chesapeake Tree Canopy Network

Connecting you with resources, stories, and best practices to [understand your canopy](#), [expand your canopy](#), and [maintain your canopy](#). Learn about and make the case to others [why tree canopy](#) is so critical to a healthy, vibrant Chesapeake Bay watershed. We are building this resource as we go, so please [send your ideas](#) and suggestions for making the network most helpful.

DE: Delaware Commits to Planting and Maintaining Trees in the State  
[Read More](#)

Get updates on tree canopy news and events! SIGN UP NEWSLETTER ARCHIVES

New Resources to Explore

County Tree Cover Fact Sheets Guide for Local Government Leaders

**Tree Cover** Status & Change  
FOR CUMBERLAND COUNTY, PA

<b>43.6%</b> <small>Total Percent of County with Tree Cover</small>	<b>\$42.6 Million</b> <small>Annual Benefits provided by Tree Cover (in reduced air pollution, stormwater, &amp; carbon dioxide)</small>	<b>-791 Acres</b> <small>Net Loss of Tree Cover on Developed Lands, 2013 to 2017</small>
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**A Local Government Guide to the Chesapeake Bay**  
Module 4: Capitalizing on the Benefits of Trees

# TREES in COMMUNITIES

## CREATE VIBRANT COMMUNITIES

- Incorporating trees into common spaces in public housing increases social activities.<sup>1</sup>
- Having larger trees in yards and on the street can improve home values by 3%-15%.<sup>2</sup>
- Shoppers will spend 9%-12% more in areas with better tree canopy.<sup>3</sup>

## REDUCE AIR POLLUTION

- Neighborhoods with lots of trees have lower childhood asthma rates.

## PROVIDE SHADE & COOLING

- Tree canopy can reduce temperatures by up to 20 degrees, lowering health risks and utility bills.



## IMPROVE HUMAN HEALTH

- Trees help reduce stress, lower blood pressure, and boost the immune system.
- Shade from trees reduces radiation that causes skin cancer.

## CONTROL STORMWATER

- Tree roots can trap sediment and filter contaminants from stormwater.
- One tree can reduce stormwater runoff by 13,000 gallons per year.<sup>4</sup>

## IMPROVE PUBLIC SAFETY

- Areas with increased green space have lower crime rates.<sup>3</sup>

Source:  
[Chesapeake Forest Restoration Strategy](#)



# Benefits are not equitably distributed...



## Tree Canopy Outcome: what is our goal?



Through the *Chesapeake Bay Watershed Agreement*, the Chesapeake Bay Program has committed to...

Continually increase urban tree canopy capacity to provide air quality, water quality and habitat benefits throughout the watershed. **Expand urban tree canopy by 2,400 acres by 2025.**

**Goal:** *Vital Habitats*

**Outcome:** *Tree Canopy*

## It's not just about planting...

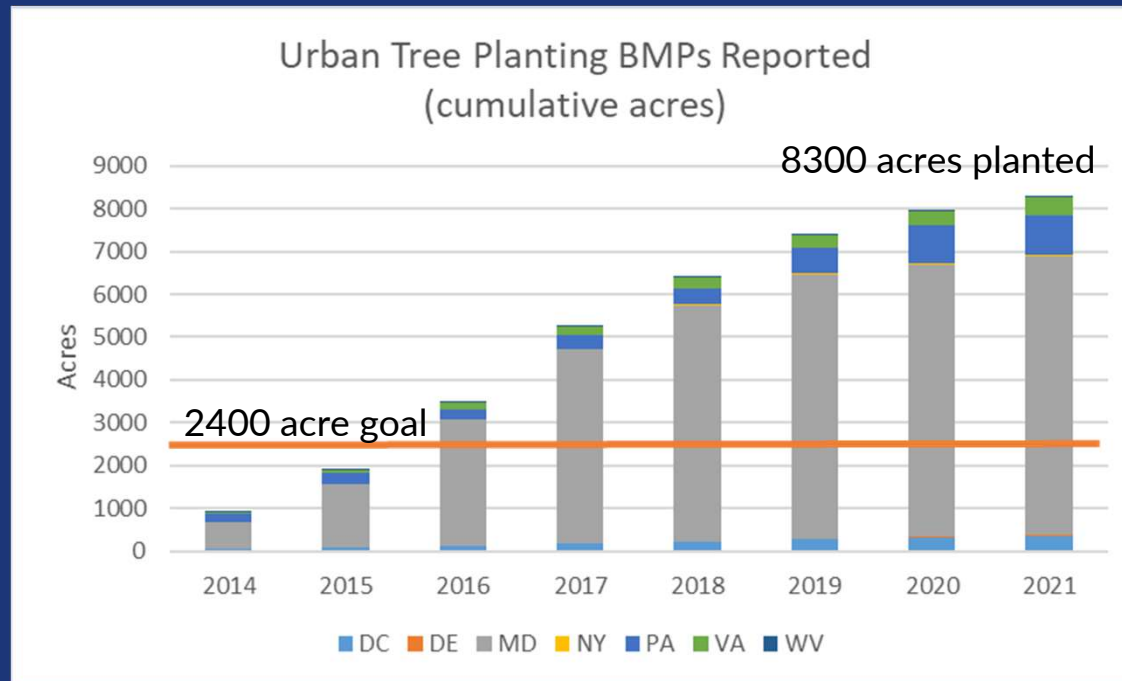


We track Tree Canopy progress in two ways:

- 1) States report three urban tree planting BMPs annually for TMDL
- 2) Long term progress analyzed through high resolution Land Cover/Land Use updates

# How are we doing?

## New Plantings

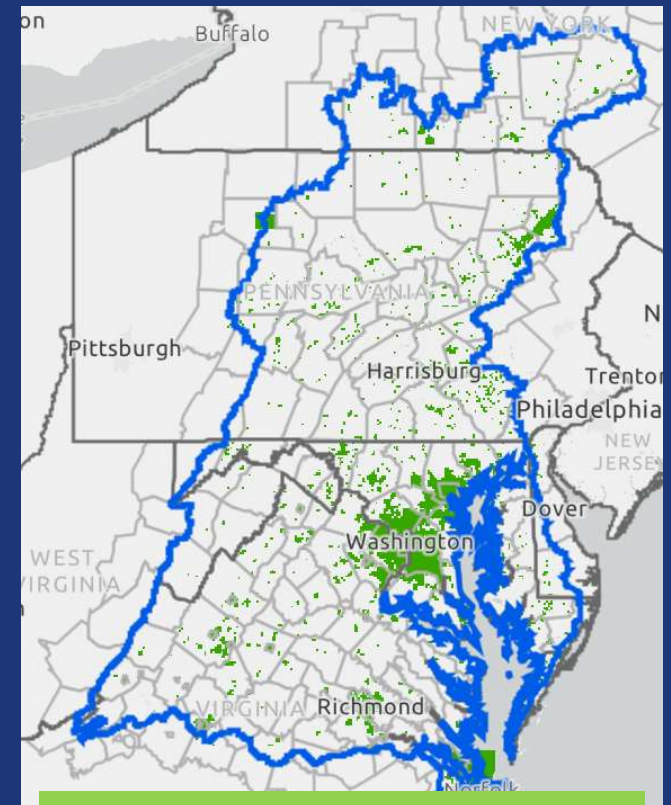




# How are we doing?

Land Cover Change  
Detected from Imagery

Tree Canopy Net Change in Census Places (2013/14-2017/18)	
Jurisdiction (CB Only)	Net Change (Acres)
Delaware	-28
DC	21
Maryland	-13,804
New York	78
Pennsylvania	-2,444
Virginia	-9,548
West Virginia	-107
Total	-25,832



2010 Census Places (Green)

[Home](#) » [Understand your Canopy](#)

## Understand your Canopy

The first step in working toward a tree canopy goal is understanding what you have. Thanks to the investments of Chesapeake Bay Program partners, we are fortunate to now have ready access to “wall-to-wall” high resolution land cover/land use data for the entire watershed, for the 2013/14 and 2017/18 time periods. Updated data based on 2021/2022 imagery are anticipated in 2024.

New county fact sheets are now available for all Chesapeake watershed counties sharing tree cover status, benefits (from i-Tree) and change information over the 2013/14 to 2017/18 time periods. Use the map viewer below to find your county’s fact sheet. Municipal fact sheets will be produced later in 2023.

Visit the [Data Guide](#) for more information on the data sources included in the fact sheets, as well as additional resources. Access to land use/land cover map viewers, GIS datasets, and detailed methods documentation are available from [Chesapeake Conservancy](#).

### Tree Cover Status & Change FOR CUMBERLAND COUNTY, PA

**43.6%**  
Total Percent of  
County with Tree Cover

**\$42.6 Million**  
Annual Benefits provided by Tree Cover  
(in reduced air pollution, stormwater, & carbon dioxide)

**-791 Acres**  
Net Loss of Tree Cover on  
Developed Lands, 2013 to 2017

What is the land use/land cover  
breakdown in your county?

350,174 ACRES OF LAND AREA  
IN CUMBERLAND COUNTY



Where does tree cover occur in your county?

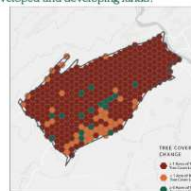
**83.9%**  
In forest  
(2,328,766 acres)

**1.4%**  
In other impervious  
(2,075 acres)

**9.4%**  
In over turf grass  
(134,411 acres)

**5.3%**  
In other tree cover  
(8,144 acres)

How is tree cover changing on  
developed and developing lands?



Understanding how your tree cover changes over time can inform the sustainable management of forests and community trees. The map to the left shows where your county has lost and gained tree cover from 2013 to 2017, focusing on land that is already or newly developed.

Tree cover can be lost quickly due to human activities (e.g., construction) or natural events (e.g., severe weather).

Tree cover can be gradually increased through tree planting and natural regrowth, but these gains may take 10-15 years to be detected in high resolution imagery.

Since mature, healthy trees provide significantly greater community benefits than newly planted trees, it is important to both preserve existing tree cover and seek opportunities to grow new trees and forests. Local land use planning, ordinances, and tree programs play a critical role!

### Featured Resources



**Tree Cover Fact Sheet  
Data Guide**

[LEARN MORE »](#)



**Chesapeake Land  
Cover/Land Use Data  
& Viewers**

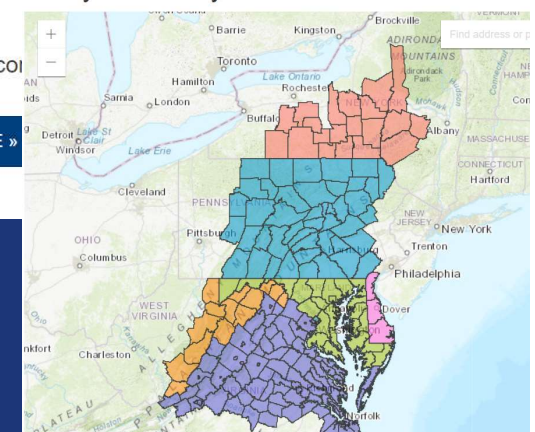
[LEARN MORE »](#)



**Tree Equity Score  
Mapping Tool**

[LEARN MORE »](#)

### Find your County Tree Cover Fact Sheet



<https://chesapeaketrees.net/understand-your-canopy/>



# County Fact Sheets now available...(municipal coming later in 2023)

## Tree Cover Status & Change FOR CUMBERLAND COUNTY, PA

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Total Percent of  
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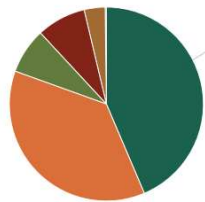
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**-791 Acres**

Net Loss of Tree Cover on  
Developed Lands, 2013 to 2017

### What is the land use/land cover breakdown in your county?

350,179 ACRES OF LAND AREA  
IN CUMBERLAND COUNTY



**43.6%** Tree Cover<sup>1</sup>  
152,816 acres

**36.9%** Agriculture  
129,193 acres

**7.6%** Turf Grass  
(Lawns)  
26,560 acres

**8.2%** Impervious  
(Buildings/Pavement)  
28,747 acres

**3.5%** Other<sup>2</sup>  
12,220 acres

**0.2%** Non-Forested  
Wetlands  
643 acres

1. Tree cover includes all trees occurring on all land uses, such as individual trees found over turf, impervious, agricultural, wetlands, or other lands. It also includes areas of "forest," defined in this dataset as patches of tree cover 1 acre or greater, with a minimum patch width of 240 feet.
2. Other includes a mixture of non-forest land uses not captured in the main pie chart categories. See the Data Guide for detailed definitions of "other" and all the land use categories.

Land use/land cover statistics were generated based on 2017 imagery using the 2022 edition of the Chesapeake Bay Land Use and Land Cover Database.

### Where does tree cover occur in your county?



### What are some benefits of tree cover in your county?



**Total Air Pollution Removal Value**  
9,680 lbs removed annually  
\$9.2 Million saved annually  
Total air pollution removal includes CO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub>, SO<sub>2</sub>, and Particulate Matter (PM2.5, PM10).



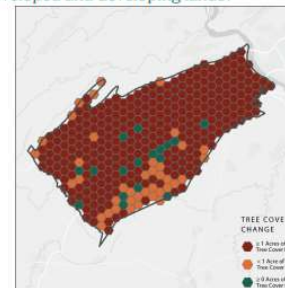
**Gallons of Reduced Stormwater Runoff Value**  
560.8 million gallons reduced annually  
\$5.0 million saved annually



**Carbon Sequestered Value**  
151,000 tons removed annually  
\$28.4 million saved annually

Calculated based on 2017 tree cover data using  
[landscape.treestools.org](https://landscape.treestools.org)

### How is tree cover changing on developed and developing lands?



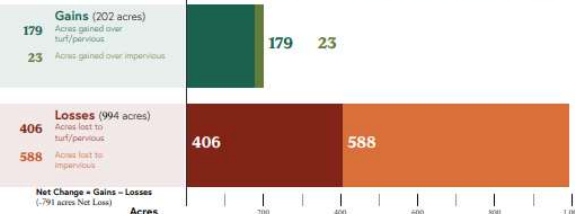
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### Tree Cover Change on developed/developing lands (2013-2017)



### Learn More:

**Chesapeake Tree Canopy Network**  
Links to county fact sheets, user guides, map viewers, datasets, and more

**Tree Equity Score**  
Explore maps of how tree benefits are distributed across communities

**Capitalizing on the Benefits of Trees**  
A slideshow for local leaders featuring tree benefits, case studies and resources

**State Urban and Community Forestry Assistance**  
(Ned Brockmeyer, Pennsylvania Website)



PUBLISHED FEBRUARY 2023



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Fact sheets produced through a grant from the USDA Forest Service. USDA is an equal opportunity provider, employer and lender.

# Tree Cover Status & Change

FOR CUMBERLAND COUNTY, PA

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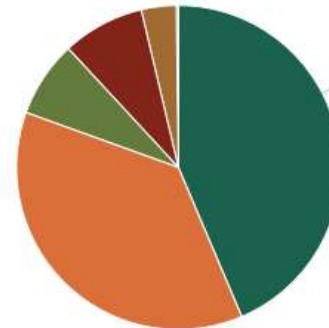
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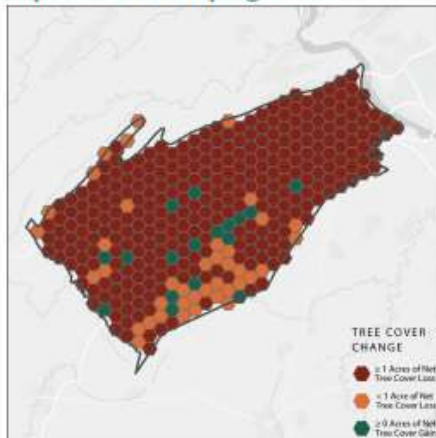
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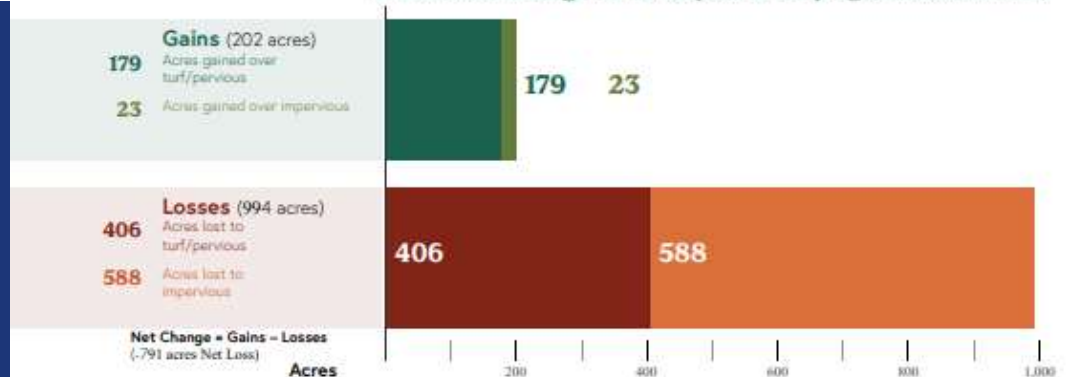
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### Tree Cover Change on developed/developing lands (2013–2017)





## Additional Resources



Chesapeake  
**Tree Canopy**  
Network

[SIGN UP](#) [NEWSLETTER ARCHIVE](#) [ABOUT US](#) [CONTACT US](#) [CHESAPEAKEFORESTBUFFERS.NET](#)

[WHY TREE CANOPY?](#) [UNDERSTAND YOUR CANOPY](#) [EXPAND YOUR CANOPY](#) [MAINTAIN YOUR CANOPY](#)

[Home](#) » [Local Government Guide: Capitalizing on the Benefits of Trees](#)

### Local Government Guide: Capitalizing on the Benefits of Trees

A Local Government Guide to the Chesapeake Bay is a [seven-module series](#) created to support decision-making by local officials. As demonstrated in Module 4 (Capitalizing on the Benefits of Trees), local officials can achieve mutually beneficial outcomes by prioritizing local economic development, infrastructure resiliency, public health, and education, while also protecting and enhancing the environment. Please use the below resources widely to help advance local tree canopy efforts. As a companion product, State Tree Resource Guides were created to highlight the state programs and grant opportunities that can help local governments achieve their goals.

#### A Local Government Guide to the Chesapeake Bay

##### Module 4: Capitalizing on the Benefits of Trees



#### Resources to Download

- [Capitalizing on the Benefits of Trees \(PPT\)](#)
- [Capitalizing on the Benefits of Trees \(PDF\)](#)
- [Fact Sheet: Capitalizing on the Benefits of Trees](#)
- [Delaware Tree Resource Guide](#)
- [Maryland Tree Resource Guide](#)
- [New York Tree Resource Guide](#)
- [Pennsylvania Tree Resource Guide](#)
- [Virginia Tree Resource Guide](#)
- [West Virginia Tree Resource Guide](#)

## Additional Resources



MENU ▾

MAP

Find your score and help create  
Tree Equity in cities and towns  
across America.

Search for your town



### Tree Equity Score

A map of tree cover in any city in the United States is too often a map of race and income. This is unacceptable. Trees are critical infrastructure that every person in every neighborhood deserves. Trees can help address damaging environmental inequities like air pollution.

The score evaluates data from each neighborhood's:



Existing tree  
canopy



Population  
density



Income



Employment



Surface  
temperature



Race



Age



Health

These metrics are combined into a single score between 0 and 100. A score of 100 means that a neighborhood has achieved Tree Equity. To learn more, visit our [methodology page](#).

TREE EQUITY SCORE

78/100



# Tree Canopy Funding & Policy Roundtable

(FY22 GIT-Funded)

Virtual: March 13-14



## Roundtable Outcomes:

**Accelerate equitable, climate-resilient tree canopy implementation across the watershed**

- Equip local and state governments to advance coordinated solution pathways to expand urban tree canopy in the Chesapeake Bay Watershed
- Identify suite of strategies and specific actions (funding, policy, programmatic) to advance tree goals
- **Develop action plans in each Bay Jurisdiction**

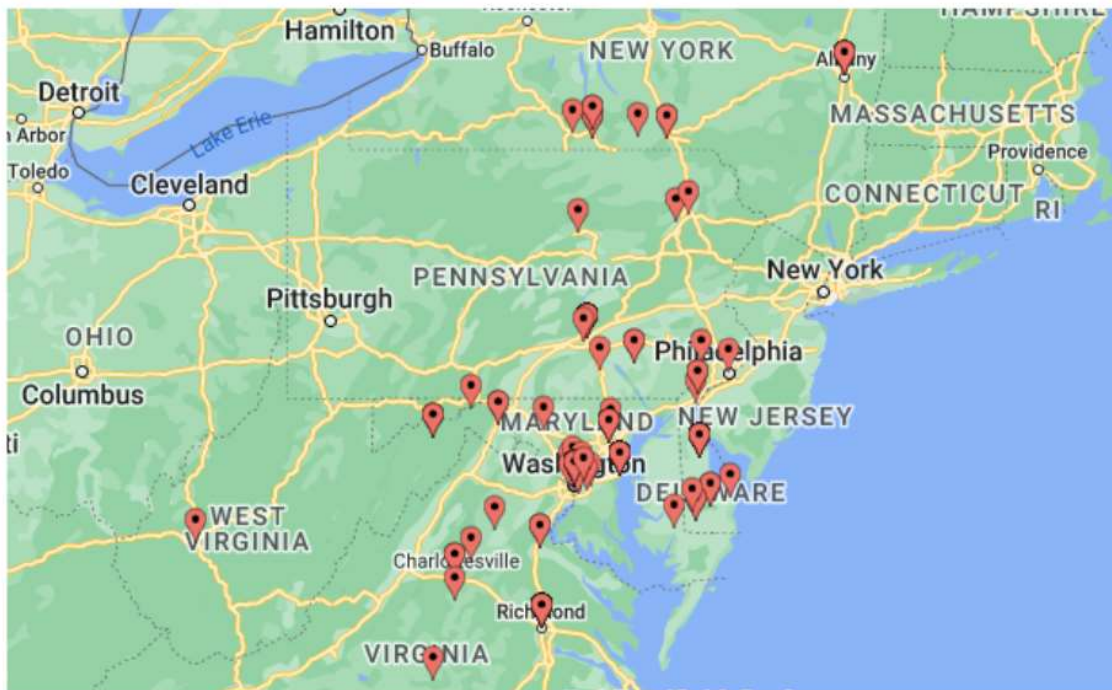


## Event summary



- March 13 and 14
- Hosted by UMD EFC
- 125 participants
- Organized around the the themes of **equity, climate resilience, and tree loss**
- Presentations and interactive breakout discussions
- Goal: pinpoint funding, policy, and programmatic solution pathways to expand urban tree canopy in the Chesapeake Bay Watershed

# Participants



# Presentations

## INTRODUCTION | Chesapeake Bay Watershed tree goals and progress

*Julie Mawhorter, USDA Forest Service*

## KEYNOTE | City of trees: Then, now, and in the future

*Earl Eutsler, District of Columbia Department of Transportation*

## PANEL | Branching out: Leveraging climate goals to achieve tree

*Rachel Lamb, Maryland Department of the Environment*

*Mark McPherson, City Forest Credits*

*Beth Krumrine, Delaware Department of Natural Resources and Environ*

*Molly Hassett, New York Department of Environmental Conservation*

## PANEL | Stemming the loss: Policy solutions for tree canopy protect

*Karen Firehock, Green Infrastructure Center*

*Marian Honecny, Maryland Department of Natural Resources Forest Service*

*Vincent Verweij, Arlington County Parks and Natural Resources*

*Katie Lautar, Baltimore Green Space*





# Presentations

## KEYNOTE | Mitigating urban heat threats through a community-driven framework

*Jeremy Hoffman, Virginia Science Museum and Sheri Shannon, Southside ReLeaf*

## PANEL | Rooted in equity: Ensuring tree canopy benefits for all

*Erica Smith Fichman, Philadelphia Parks & Recreation*

*Brenda Richardson, Anacostia Parks and Community Coll*

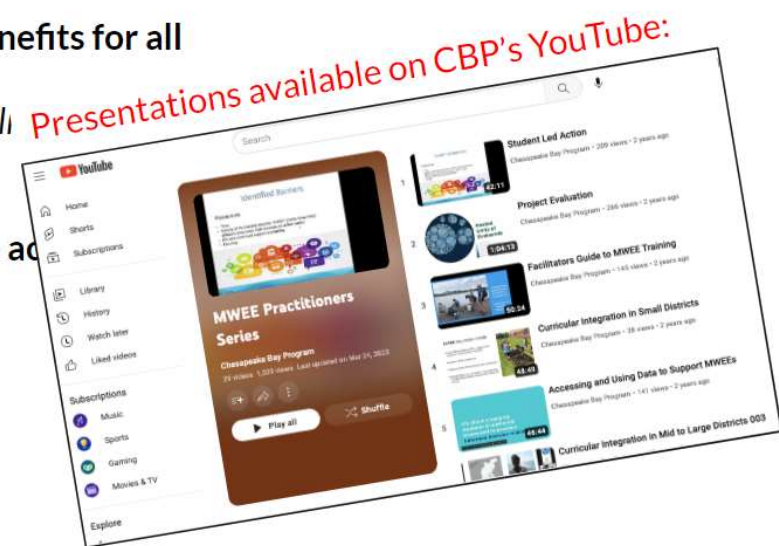
*Ruby Stemmler, ecoLatinos*

## PANEL | No leaf unturned: Local strategies to drive action

*Frank Rodgers, Cacapon Institute*

*Cody Kiefer, City of Lancaster, PA*

*Ryan Alston, Baltimore Tree Trust*



[https://www.youtube.com/playlist?list=PLRa28NrZJAF610W5fUtsy5y8MoNloB\\_sB](https://www.youtube.com/playlist?list=PLRa28NrZJAF610W5fUtsy5y8MoNloB_sB)

## Discussion groups



### Climate

- Data technical assistance needs
- Building resilience into state and local tree policies
- Leveraging state and federal funding

### Tree loss

- Regional policy
- State policy
- Local policy: Cities
- Local policy: Smaller places

### Equity

- All rooms discussed the same prompts

### Advancing Local Action

- One room for each state / DC

4 sessions

7-9 rooms per session (some differentiated)

120 pages of compiled input just for breakouts

## Example - input around tree loss

### Major drivers of tree loss



#### Roadblocks:

- Lack of capacity and expertise at local level
- Difficulty engaging partners
- Competing priorities
- Lack of political will
- Difficulty of valuing trees / forests

#### Key strategies:

- Proactive planning at all levels
- Need for incentives and regulations
- Critical role of maintenance



## Example – draft equity strategies

Amend grant funding programs to: (1) simplify the application process, (2) waive or reduce match requirements for qualified applicants, (3) lengthen the grant / contract time scale, (4) fund ongoing work and maintenance as well as planning (not just new projects), (5) prioritize community outreach and engagement, (6) prioritize projects in disadvantaged communities.	Really important, have grant navigators to support locally led proposals
In communities targeted for tree canopy initiatives, proactively identify and meaningfully partner with existing champions and trusted voices, including civic associations, faith-based organizations, businesses, local nonprofits, schools. Let the partner lead; spend time in the community; listen; be clear and honest.	How do we find existing champions? Partner with anchor institutions- churches, schools, recreation programs
Dedicate a greater share of state and local funding for community outreach and organizing (including to hire dedicated outreach staff and to provide incentives for community members to participate in project planning / implementation).	Need innovative procurement
Invest in target communities through capacity building and technical assistance: direct grant-writing assistance, community organizing training, professional development, “community blitzes” to connect communities with resources.	Ask around and understand what network exists and how trees benefit existing goals
Invest in target communities through workforce development: hire tree care coordinators and tree maintenance staff from the communities served; provide training, mentorship and support.	Highlight this one, include certifications useful for finding



## **Roundtable Next Steps (summer 2023)**

- Jurisdiction Strategy Sessions & Action Plans
- Comprehensive Roundtable Report and Executive Summary
- Update Chesapeake Tree Canopy Logic and Action Plan (2023-2024)
- Share key findings and recommendations with CBP Leadership and in public webinar

# Biden-Harris Administration Announces Historic Funding to Expand Access to Trees and Green Spaces in Disadvantaged Urban Communities

*More than \$1 billion from President Biden's Investing in America Agenda will increase urban tree cover, boost equitable access to nature, and tackle the climate crisis*

**Newark, N.J., April 12, 2023** – Today the Biden-Harris Administration is announcing the availability of [\\$1 billion in grants](#) to increase equitable access to trees and green spaces in urban and community forests where more than 84% of Americans live, work and play. The announcement is part of President Biden's Investing in America agenda and the Administration's work to build a clean energy economy, advance environmental justice and create economic opportunity in communities across the country.

The funding announced today is part of a \$1.5 billion investment in the U.S. Department of Agriculture's Forest Service Urban and Community Forestry Program from President Biden's Inflation Reduction Act.

## Press Release

Release No. 0080.23

**Contact:** USDA Press

**Email:** [press@usda.gov](mailto:press@usda.gov)

## Inflation Reduction Act Funding

US Forest Service Urban and Community Forestry Program (\$1.5 billion)

1. Funding to state forestry agencies announced April 12 (\$250 million)
2. National grant competition closes June 1 (Up to \$1 billion)

## More on State Forestry IRA Funding

Competitive sub-grant programs for disadvantaged communities (CEQ Climate and Economic Justice Screening Tool) – later in 2023/early 2024

DC - \$750,000

DE - \$750,000

MD - \$6 million

PA - \$9.75 million

NY - \$13.5 million

VA - \$6.6 million

WV - \$750,000

Notice of Funding Opportunity (due June 1): <https://iraucfgrants.urbanandcommunityforests.org/>



## Ideas/questions for next Watershed Agreement

- Stronger incentives/credits and policy options focused on conserving, maintaining and expanding tree canopy (integrated with TMDL, MS4, and other drivers)
- Is 2400 acres net gain the right target? (when we lost over 25K acres in a 4-5 year period)
- Incorporate additional tree equity metrics into the outcome?
- How to collaborate more effectively around related outcomes (that are separate in CBP structure)?
  - Tree canopy with DEIJ, climate, stewardship, land use, land conservation, healthy watersheds, etc.



## Questions & Discussion



Thank you!

Follow up:  
Julie Mawhorter,  
[julie.mawhorter@usda.gov](mailto:julie.mawhorter@usda.gov)